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Connect more

Demand more from your devices

The Digital Matter Difference

QUALITY matters

‘Good Enough’ is Not Enough For Your Critical Assets

Details matter. Our entire process is underpinned by a relentless attention to detail to consistently deliver solutions of the highest-possible quality and reliability.

POWER matters

The Power to Do More with 'Deploy Once' Battery Life

Through smarter design and better engineering we’re now able to achieve ‘deploy once’ battery life, significantly reducing operating costs and enabling deployments at scale.

FLEXIBILITY matters

Demand More From Your Devices

Easily configure your devices with full control over a rich set of device parameters. Send data to any end platform with multiple integration options.

With custom hardware, housing, firmware, and software options, we can also work with you to bring a fully custom asset tracking or sensor monitoring solution to market.

SECURITY matters

Authenticated and Encrypted Everywhere

We implement comprehensive security protocols on our hardware and software to protect the integrity and confidentiality of your telematics data.

Measures such as multi-factor authentication, regular infrastructure security updates, frequent vulnerability testing, and more keep your data secure.

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Device Manager

Robust and Scalable Over-the-Air Device Management

Unlock the full potential of your IoT asset tracking solution with Device Manager, our comprehensive device management platform designed to simplify configuration, integration, and deployment.

CONNECT

Configure APN, LTE bands, and other network settings with comprehensive debug-ging tools to quickly resolve connection issues.

CONFIGURE

Take control of our extensive range of device parameters to optimize for every application. Manage templates to provision devices at scale.

MONITOR

View critical diagnostic data including last connected date, battery and external voltage, critical debug logs, and device statistics.

UPDATE

Manage parameter and firmware updates over-the-air and at scale to apply new device features and security enhancements.

INTEGRATE

Send data anywhere with fast and flexible integration control. Forward device data via HTTPS or TCP, view live server logs, forward to multiple endpoints, or perform API calls.

ENRICH

Resolve Edge devices GNSS, Wi-Fi Access Point, and Cell Tower scan data to locations. Manage sending device almanac files and position estimates.

INSTALL

Reduce expensive and support-intensive installation errors with built-in Installer tools. Perform quick health checks to remotely confirm device installation is correct.

SECURE

Designed for resilience at scale. Two-factor authentica-tion and AES-256 device and server authentication and encryption.

BATTERY-POWERED

4G / 5G - LTE-M (Cat-M1) / NB-IoT

						
	Yabby3	Oyster3	Oyster3 Bluetooth	Remora3	Yabby Edge	Oyster Edge
Key Differentiators	Compact size	Optimal balance between size and battery life with LTC support	Oyster with Bluetooth - connect more with BLE tags and sensor monitoring	Longest-life tracker on the market - 'Second-by-Second' tracking and BLE tags and sensor monitoring	Compact size with Indoor/Outdoor location	Indoor/Outdoor location and BLE tags and sensor monitoring
Connectivity	LTE-M and NB-IoT	LTE-M and NB-IoT	LTE-M and NB-IoT	LTE-M and NB-IoT	LTE-M and NB-IoT	LTE-M and NB-IoT
Environment	Outdoor	Outdoor	Outdoor	Outdoor	Indoor/Outdoor	Indoor/Outdoor
Location Technologies	Full GNSS Cell Tower Location	Full GNSS Cell Tower Location	Full GNSS Cell Tower Location	Full GNSS Cell Tower Location	GNSS Scanning Wi-Fi Scanning Cell Tower Location	GNSS Scanning Wi-Fi Scanning Cell Tower Location
Cloud-Based Location Solving	-	-	-	-	Yes	Yes
Bluetooth®	-	-	5.2 Gateway	5.2 Gateway	-	5.2 Gateway
Housing Size	85 x 63 x 24 mm (3.35 x 2.48 x .94")	108 x 86 x 31 mm (4.25 x 3.39 x 1.22")	108 x 86 x 31 mm (4.25 x 3.39 x 1.22")	224 x 91 x 41 mm (8.82 x 3.58 x 1.61")	85 x 63 x 24 mm (3.35 x 2.48 x .94")	108 x 86 x 31 mm (4.25 x 3.39 x 1.22")
IP Rating	IP68 Rugged Waterproof	IP68 Rugged Waterproof	IP68 Rugged Waterproof	IP68 Rugged Waterproof	IP68 Rugged Waterproof	IP68 Rugged Waterproof
Batteries	3 x AAA Lithium	3 x AA Lithium or Lithium Thionyl Chloride	3 x AA Lithium	2 x D Lithium Thionyl Chloride	3 x AAA Lithium	3 x AA Lithium
* Battery Life (Daily)	10+ Years	10+ Years	10+ Years	20+ Years	10+ Years	10+ Years
* Battery Life (Movement-Based)	3+ Years	6+ Years	6+ Years	10+ Years	3.5+ Years	7+ Years
* Battery Life (Hourly)	1.5+ Years	3.5+ Years	3.5+ Years	10+ Years	2+ Years	4.5+ Years

* Battery life estimates are influenced by several factors including temperature, installation location and orientation of the device, the frequency of location updates, network coverage, sensor integrations, peripherals, accelerometer settings, and more. Battery life estimate calculators are available at support.digitalmatter.com. For battery life estimates over 10 years, please consider network technology availability as well as battery manufacturer lifespan and self-discharge specifications.

OBDII AND WIRED

2G, LTE-M (Cat-M1) / NB-IoT, and Iridium Satellite Hybrid Solutions

	Bolt2	Dart3	G70	G120
Key Differentiators	Plug-and-Play install with backup battery	Low-cost wired solution with I/Os	Dustproof and waterproof rugged wired solution with I/Os	Wired solution with additional I/Os, Bluetooth®, and optional Iridium
Connectivity	LTE-M and NB-IoT	2G or LTE-M and NB-IoT versions	2G or LTE-M and NB-IoT versions	LTE-M and NB-IoT Optional Iridium Edge Satellite Hybrid
Installation	OBDII	Wired / optional OBDII or cigarette lighter power harness	Wired	Wired
IP Rating	–	–	IP68 Rugged Waterproof	–
Real-Time Tracking	Yes	Yes	Yes	Yes
Bluetooth®	-	-	-	5.0 Gateway
Backup Battery	Yes	Yes	Yes	Yes
Ignition Digital Input	-	1	1	1
Digital Inputs	-	3	3	6
Analog Inputs	-	1	1	1
Switched Ground Digital Output	-	1	1	2
Switched Power Out	-	Yes	-	Yes
RS-232 Interface	-	-	-	Yes
Driver ID	-	Yes	Yes	Yes
Driver Behavior	Yes	Yes	Yes	Yes
Run Hour Monitoring / Odometer	Yes	Yes	Yes	Yes
Remote Immobilization	-	Yes	Yes	Yes

IoT DATA LOGGER AND SENSOR HUB

LTE-M (Cat-M1) / NB-IoT and Swarm IoT Satellite

	Hawk Cellular	Hawk Satellite (Coming Soon)
Key Differentiators	Connect any sensor within cellular coverage	Connect any sensor outside of cellular coverage
Connectivity	LTE-M and NB-IoT	Swarm IoT Satellite
Environment	Indoor/Outdoor	Outdoor
Architecture	Flexible I/O Card Architecture caters for plug-in cards that define the 9 inputs/outputs	
Multiple Power Options	- Large internal rechargeable 3500mAh LiPo battery - External power including solar - 2 x D Cell LTC batteries	
Rugged Housing Options	Hawk LiPo - Accommodates PCB, I/O Card and LiPo battery Hawk D Cell - Accommodates PCB, I/O Card, and 2 x D Cell LTC batteries	
Onboard Digital Input	1 x Digital Input with configurable pull up/pull down 0-40V DC input range Can be used for pulse counting	
Onboard Output Power	Flexible onboard output power to power your sensors	
Onboard Task Management	Powerful onboard task management allows you to schedule tasks or run tasks based on sensor thresholds and events	
Onboard LiPo Battery Charger	Onboard LiPo battery charger with selectable charge rate	
Onboard Accelerometer	Yes	-

Integrate Any Sensor with Plug-and-Play I/O Cards

Agtech1	1 x Digital Input, 1 x Switched Ground, I²C, SDI-12, 3.3V Switched Power Out, 5V or 12V Switched Sensor Power, 1-Wire® or iButton®, 4-20mA
Agtech2	4 x Analogue Inputs (0-30V Range), 1 x Switched Ground, SDI-12, 3.3V Switched Power Out, 5V or 12V Switched Sensor Power, 1-Wire®
Bluetooth Gateway	Coming Soon
RS-485	1 x Analogue Input (0-30V Range), 1 Digital Input, 1 x Switched Ground, RS485 (Modbus), 3.3V Switched Power Out, 5V or 12V Switched Sensor Power, 1-Wire®, 1 x 4-20mA input
Serial (RS-232 and TTL)	Coming Soon
Custom Card	Custom card development is available. MOQs may apply.

Hawk PCB, I/O Cards, and Housing Sold Separately

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LoRaWAN®

				
	Yabby Edge LoRaWAN	Yabby3 LoRaWAN	Oyster3 LoRaWAN	G62 LoRaWAN
Key Differentiators	Compact size with Indoor/Outdoor location	Compact size	Longest-life LoRaWAN asset tracker on the market - Optimal balance between size and battery life with LTC support	Dustproof and waterproof rugged wired solution with I/Os
Frequencies	868 or 902-928 MHz versions	All 868, 902-928 MHz regions supported in single SKU	All 868, 902-928 MHz regions supported in single SKU	All 868, 902-928 MHz regions supported in single SKU
Power	Battery-Powered	Battery-Powered	Battery-Powered	Wired with Internal Backup Battery
Environment	Indoor/Outdoor	Outdoor	Outdoor	Outdoor
Location Technologies	GNSS Scanning Wi-Fi Scanning	Full GNSS	Full GNSS	Full GNSS
Cloud-Based Location Solving	Yes	-	-	-
IP Rating	IP68 Rugged Waterproof	IP68 Rugged Waterproof	IP68 Rugged Waterproof	IP68 Rugged Waterproof
Batteries	2 x AAA Lithium	3 x AAA Lithium	3 x AA Lithium or Lithium Thionyl Chloride (LTC)	-
* Battery Life (Daily)	12+ Years	7+ Years	10+ Years	-
* Battery Life (Movement-Based)	6+ Years	2+ years	5+ Years	-
* Battery Life (Hourly)	3+ Years	7+ Months	2+ Years	-
Inputs / Outputs	-	-	-	1 x Analog Input, 3 x Digital Inputs, 1 x Switched Ground Digital Output, 1 x Ignition Digital Input

* Battery life estimates are influenced by several factors including temperature, installation location and orientation of the device, the frequency of location updates, network coverage, sensor integrations, peripherals, accelerometer settings, and more. Battery life estimate calculators are available at support.digitalmatter.com. For battery life estimates over 10 years, please consider network technology availability as well as battery manufacturer lifespan and self-discharge specifications.

Demand More from Your Devices

Easily configure your devices to provide more than just a dot on the map with full control over a rich set of device parameters.

Device Management - Parameter Examples

Parameter	Description
Battery Voltage	Customize battery-related alerts such as sending a log when the internal battery level drops.
External Power	Customize power settings to facilitate 'power removed' alerts. Set some devices to keep peripherals powered while in sleep mode.

Fleet Management - Parameter Examples

Parameter	Description
Accident Detection	Set accident logging based on custom accelerometer thresholds. Customize the change in velocity needed to be treated as an accident. Optional Roll Logging including Roll Threshold. Set general accelerometer settings including Wakeup Threshold.
Driver Fatigue	Set parameters to trigger a buzzer when a certain amount of trip time has elapsed. The time between buzzes, the number of times the buzzer sounds, and the maximum amount of time before alerting the driver to stop can all be customized.
Driver ID	Driver ID functionality customization including asset immobilization/buzzing if no Driver ID detected.
Fuel	Configure integrated fuel sensors. Set parameters such as frequency of fuel sensor polling and the frequency of logging the fuel sensor reading.
Geofence Downloads	Manage geofences and configure device behavior when inside/outside including varying the reporting rate, flash lights or sound buzzers, speed alerts, and more.

Fleet Management continued

Parameter	Description
Harsh Driving	Set thresholds and configure alerts for harsh driving, including acceleration thresholds, harsh braking and cornering, and more.
Idle Monitoring	Set custom thresholds for Idle Time Logging - i.e. idle time threshold, idle speed threshold, and whether or not the accelerometer should prevent idling.
Inactivity Timer	Configure alerts if device does not move for a specified time frame.
Odometer	Enable on-device odometer and run hour logging.
Speeding	Enable a global threshold for speeding. If the asset exceeds this speed, a log can be created or a buzzer made to sound. The device can log additional records when over the threshold for detailed alerts.

GPS Settings - Parameter Examples

Parameter	Description
Advanced GPS Settings	Configure GPS timeout behaviors such as how long the device will attempt to achieve a fix to conserve energy in poor signal conditions.
GPS Accuracy	Customize GPS accuracy requirements such as the minimum PDOP, Positional Accuracy, and Speed Accuracy required for a valid fix.
GPS Jamming I/Os	Set outputs when GPS jamming or interference is detected. Devices can send record logs when jamming/interference is detected and when it stops.

Inputs/Outputs - Parameter Examples

Parameter	Description
Analog Inputs	Configure device analog inputs to read sensors such as fuel probes, temperature probes or tank level sensors and set thresholds to generate alerts.
Digital Inputs	Configure active level and bias resistor value on digital inputs. Configure buzzers to sound when inputs are active/inactive.
Digital Outputs	Configure Switched Ground or Switched Power outputs for use with buzzers, immobilization relays, or control a pump or other equipment.
Input Monitor	Configure advanced actions based on the combined state of multiple inputs and a speed threshold.

Parameter Examples Continued...

Network Settings - Parameter Examples

Parameter	Description
APN	Configure the APN the device will use to connect to the network.
Network Optimization	Configure the Radio Access Technology (LTE-M or NB-IoT) and Network Bands the device will attempt to connect on to optimize battery life and roaming performance.
Iridium	Enable Iridium uploads for when an Iridium Edge is connected to a G120. Alter Iridium-specific logging settings including in trip log intervals and heartbeats to manage data usage.
Registration Timeouts and Strategy	Configure Network Registration Timeouts and the strategy the device uses to balance getting connected and conserving power when out of coverage.

Tracking Behaviors - Parameter Examples

Parameter	Description
Accelerometer Settings and Wakeup Behavior	Configure the intensity and duration of vibration which will begin a trip or prompt GPS checks.
After Hours	Set After Hours start and end days and times with alternate reporting behaviors.
Bluetooth Tag and Sensor Scanning	Set Bluetooth scanning parameters i.e. scanning on trip start/end/in-trip, which tags to scan for, and more.
GPS Movement Trips	Configure the amount of movement required to begin and end a trip.
High-G Detection	Configure a threshold to trigger impact alerts.
Logging	Customize numerous 'In Trip' logging features including frequency of device logging, heading change logging, and more. Enable/Disable log triggers such as start of trip, end of trip, and more.

Tracking Behaviors continued

Parameter	Description
Recovery Mode	Configure the behavior of the device while in Recovery Mode (live tracking, logging interval, and more).
Run Detection	Configure trips to begin and end based on changes in external voltage (asset battery voltage).
Scheduled Uploads	Configure uploads to occur at specific times of the day, such as shift changes.
Tamper Detection	Configure alerts if a device is removed from an asset activating the magnetic tamper sensor.
Tip Detection	Configure logging and upload behavior when device is tilted beyond a user-defined threshold.
Tracking Modes	Configure device to report on set time intervals and/or when movement occurs - GPS or accelerometer based.

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